

# Funding for Pollution Prevention

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# Contributors/Presenters

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# What funding?

- Funding of P2 programs and elements very different from past practices
- Lack of direct program funding from EM/HQ has given birth to many creative and a wide variety of funding mechanisms for P2 programs
- No “one-size-fits-all”; No magic pill
- Return on Investment (ROI) projects on the rise
- Increase in use of environmental accounting principles (<http://www.epa.gov/opptintr/acctg/>)
- Increase in ownership for P2 projects at the project level
- Increase in working with external resources for win-win partnering

# Environmental Management Accounting (EMA)/Financial Accounting (EFA)

- **EMA: Management Accounting with a particular focus on materials & energy flow information and environmental cost information**
- **EFA: Financial Accounting with a particular focus on reporting environmental liability costs and other significant environmental costs**
- **Ties P2 planning into corporate planning process**
- **Directly compatible with EMS ISO 14001 requirement to identify objective and targets specific to company needs to continual improvement**

## ORNL Experience

<http://www.ornl.gov/adm/ornlp2/p2main.shtml>

- **In the past - \$1.1 M Direct Funding for Oak Ridge Reservation**
- **EM reduced direct/eliminated funding in FY2003**
- **UT-Battelle overhead funding provided for ORNL Core P2 Program in FY03 and FY04**
- **Increase in participation by the line in FY04 for ROI through facility design and work planning**

# ORNL P2 Program Funding

- **Program Management – Overhead funded**
  - Pollution Prevention Program Manager (part time)
  - Regulatory Planning/Reporting
  - Compliance/Requirements Maintenance
  - P2 Reporting – Waste Generation, Tracking, Trending
  - Affirmative Procurement Program and Reporting
  - Goals Development
  - Awareness/Communication
- **Recycling Programs – Overhead funding, some costs offset by recycling**
  - Chemical Management Center – Overhead funded
  - Scrap metal/other recycling programs
  - Maintain Recycling Contracts
- **Line Management Participation – Mainly project funded; some P2 program funding**
  - Deployed environmental support to line (ECRs, WSRs)
  - P2 Gains through ISO14001 Goals
  - Aggressive waste reduction goals
  - ROI projects
  - Work Planning
  - Facility Planning

# Leadership in Energy and Environmental Design (LEED) at the Oak Ridge National Laboratory

<http://www.ornl.gov/adm/ornlp2/p212.htm>

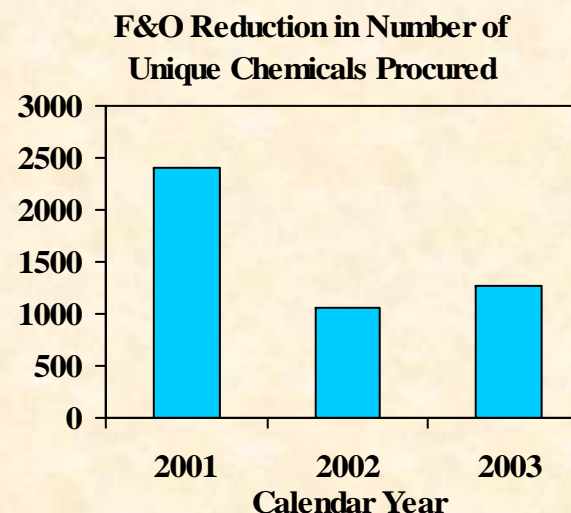


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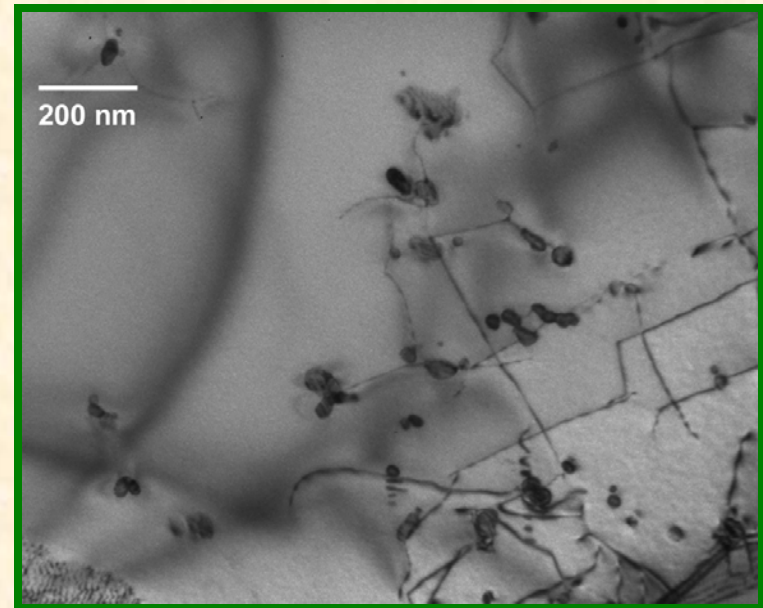
# Facilities and Operations (F&O) Directorate Web-Based Chemical Purchasing System

<http://www.ornl.gov/adm/ornlp2/p212.htm>



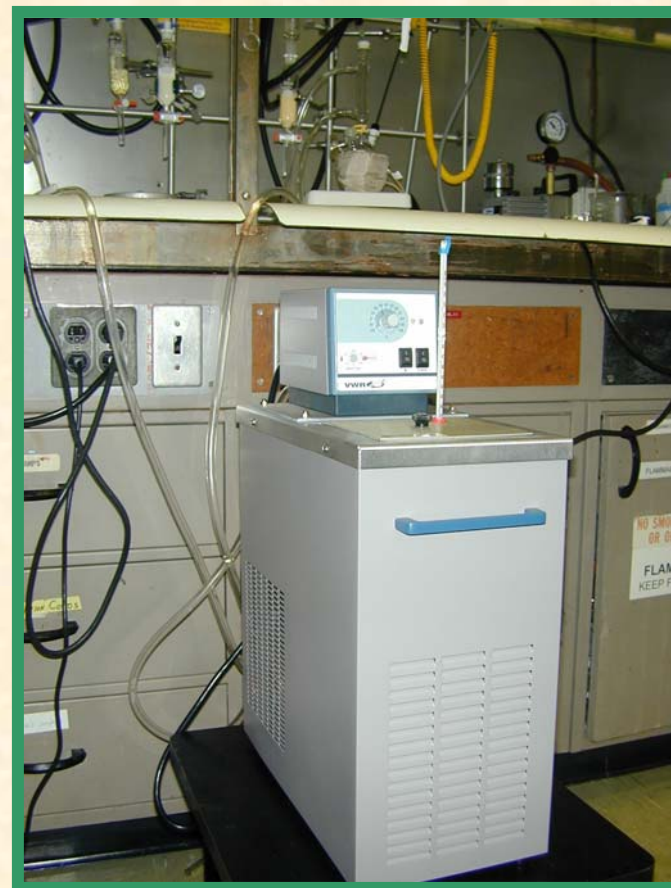
# Imaging Plate System Implementation Eliminates Photographic Chemicals

<http://www.ornl.gov/adm/ornlp2/p212.htm>



# Waste Water Reduction Activities at the Oak Ridge National Laboratory

<http://www.ornl.gov/adm/ornlp2/p212.htm>



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# High Flux Isotope Reactor (HFIR) Ni-Cd Battery Reuse

<http://www.ornl.gov/adm/ornlp2/p212.htm>



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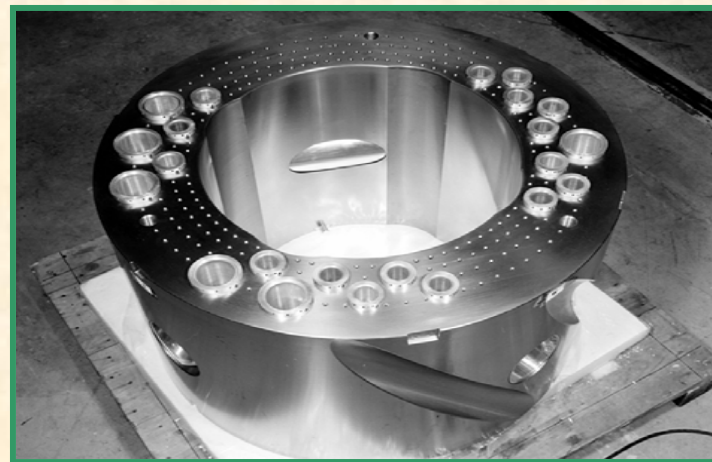
# P2 Funding Through Goal Planning

- Reduce routine waste generation by 50% by end of FY05
- Based on reducing future **costs** associated with the transfer in responsibility for newly generated waste from EM to SC
- Laboratory Leadership Goal – Lab Agenda
- Line Organization Ownership
- Included in Division Performance Plans and Directors Personal Goals
- Goals and Actions devised by Line Org – and **costs** to implement them
- Tracking/Communication provided through ORNL P2 Program
- Develop P2 equipment “wish list” for year end excess funding

# P2 Funding Through Work Control

- **Work Control Process at ORNL**
  - Research and Development
  - Maintenance, Operations and Services
  - Office Environments
- **Based on ISMS**
  - Prompting questions: P2; waste generation; environmental aspects/impacts
  - Identify hazards and **costs** associated with the work
  - Control hazards and **costs**
- **Feedback Mechanism**
  - Prompts user to provide feedback on P2 actions
  - Many “hidden” P2 successes in safety improvements

# P2 Funding Through Facility/Project Design

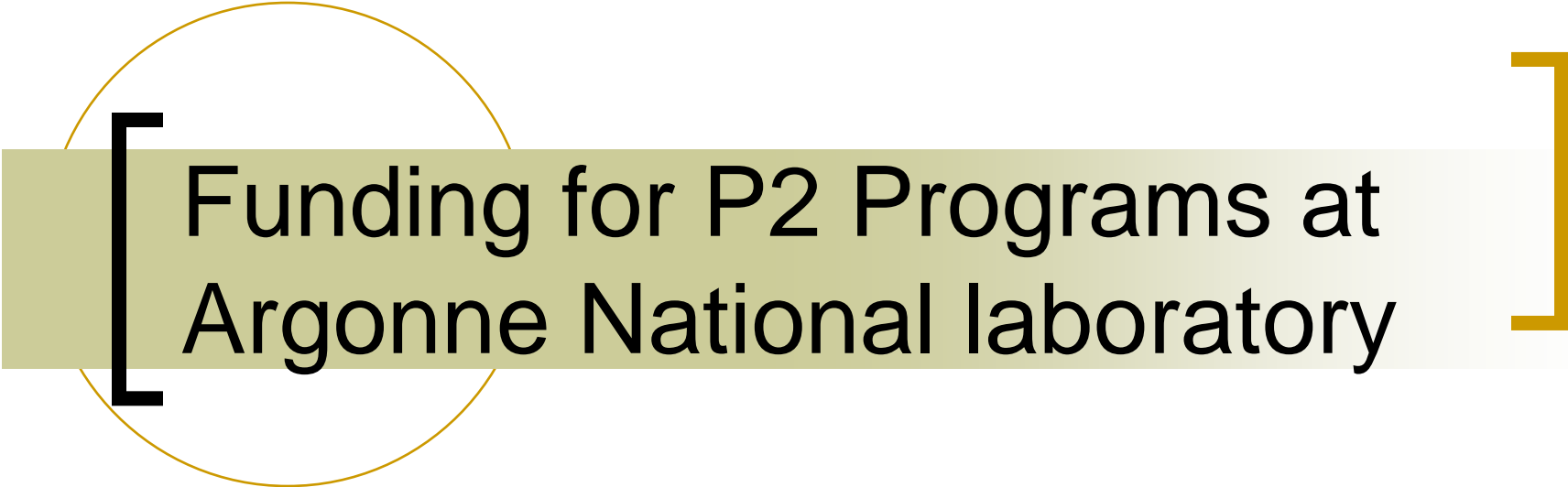


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# Summary

- **Deploy wide variety of mechanisms to fund P2 program**
- **Cost-benefit may not necessarily bring funding to the P2 program**
- **Responsibilities for cost drive positive EMA/EFA decisions at the project and corporate level**
- **Build P2 mind set into all work control levels**
- **Capture P2 successes through communication**



# Funding for P2 Programs at Argonne National laboratory

Barbara Markwenas,  
Pollution Prevention Manager

# [Funding Mechanisms]

- WMPP Programs/Projects direct funded from the overall Laboratory budget
- Additional funding for the program comes from recycling rebates
- Sustainable Design funded in conjunction with:
  - “Site Enhancement”, “Land Management”, and Habitat Restoration” committee
  - Grounds Department
- Other efforts are funded through cooperative efforts to jointly fund ROI projects.